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10/648,587	08/26/2003	Michael Ian Willer	50T5549.01	4084

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/648,587
Filing Date: August 26, 2003
Appellant(s): WILLER ET AL.

John L. Rogitz
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on January 19, 2006, appealing from the Office action mailed On September 22, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,690,268 SCHOFIELD ET AL. 2-2004

"BlueCore 2-ROM, Single Chip Bluetooth system, Production Information Data Sheet for BC213143A:, Cambridge Silicon Radio, (August 2005), pp. 1-106

"BLUECORE01b, Single Chip Bluetooth Device", Cambridge Silicon Radio, (July 2001), pp1-15

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 7-16, 18-23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthey et al., 6477464, in view of Peterzell et al., 2003/0040292.

McCarthey et al. disclose a GPS antenna (12'); a GPS receiver (14') coupled to the antenna that includes a synthesizer (inherent); a second antenna and transceiver with synthesizer (inherent) on lines 34-59, on column 2; one module (17) holding the GPS receiver, wireless receiver and antenna; the GPS antenna is mounted on the module in figure 2; a rear view mirror support the module in figure 2; the wireless transceiver receives data from the GPS receiver and transmits the data on lines 42-52, on column 2 and on lines 23-57, on column 5 and the incorporated by reference disclosures in that section, specifically application 09/793002, now patent 6690268; the wireless transceiver receives data from at least one vehicle sensor and transmits the data on lines 23-57, on column 5 and the incorporated by reference disclosures in that section; and the data is transmitted to a portable computing device selected from one of a PDA, wireless telephones, and a laptop, for display on lines 48-67, on column 3, and lines 5-15, on col. 94 of incorporated patent 6,690,268; wherein the transceiver receives vehicle data or diagnostic data from at least one vehicle sensor other than the GPS receiver and transmits the vehicle data to a component and displaying information associated with the transmitted GPS data on lines 20-24, on col. 23, 5-54, col. 51, line

56-43, on col. 56, lines 18-25 and 58-68, on column 61, lines 1-56, on column 62, and lines 38-53, on col. 72, all in incorporated patent 6,690,268. McCarthey et al. do not disclose a reference oscillator providing signals to both the GPS receiver synthesizer and wireless transceiver synthesizer while not sharing any other components; and a dual SAW filter package in the module, signals from both antennae being filtered through the SAW filter package. Peterzell et al. teach a reference oscillator providing signals to both the GPS receiver synthesizer and wireless transceiver synthesizer while not sharing other components including a mixer in paragraph 63; and a dual SAW filter package in the module, signals from both antennae being filtered through the SAW filter package(70). It would have been obvious to one of ordinary skill in the art to use the oscillator and SAW filter of Peterzell et al. in the invention of McCarthey et al. because such modification would provide for a less expensive construction through reducing current needs and board area by eliminating the need for more than one oscillator as disclosed by Peterzell et al. in paragraph 83. Using a SAW filter is a design choice. SAW filters were well known in the art at the time the invention was made because of their bandpass filter shape factors.

(10) Response to Argument

Local Oscillator does not equal Reference Oscillator

The most important thing to understand in Peterzell et al. is that a local oscillator is not equal to a reference oscillator. The terms have two different meanings. A local oscillator in Peterzell et al. is a signal from the reference oscillator that has been either stepped up or down in frequency from the reference oscillator. This is best illustrated by

figures 8 and 6. While figure 8 shows a transmitter section, the oscillator construction applies to all of the embodiments. Figure 8 has one reference oscillator that has circuitry to provide multiple local oscillator (LO) outputs. These signals are what leave box 602. Figure 6 shows an individual local oscillator circuit. Peterzell et al. disclose there may be one of these for each RF path in paragraph 58. They would have different circuits such as phase locked loops but they would be fed the same reference frequency (405) from a reference oscillator as in figure 8. Paragraph 58 is also important because it discloses the possibility of separate hardware for each RF path (such as bluetooth, GPS, GSM, cellular, PCS). This disclosure of fully separate hardware for different RF paths reads on the limitation of the wireless transceiver and GPS receiver not sharing any components. With this separate hardware there would be separate local oscillators, but these local oscillators would all be based off of the one reference oscillator. This provides the teaching that makes the claims obvious over McCarthey et al.

Along with each separate RF path there is disclosed a separate BPF (bandpass filter - 316). The reference already discloses the use of SAW filters. One of ordinary skill in the art would clearly understand the advantages of using SAW filters for these multiple BPFs for each RF path. Appellant is ignoring the full disclosure and concentrating on one narrow section.

Appellants' specification provides probative information. It discloses that one of the typical wireless receivers in their invention is illustrated by the Cambridge Silicon Radio BlueCore 2 Bluetooth transceiver. The information data sheet has been provided

for this chip. What is most relevant in the data sheet is the specification for the local oscillator in the Bluetooth synthesizer shown on page 31, and described in section 7.3, and 7.4, on page 32. Section 9.4 on page 56 describes how the local oscillator and internal clocks are based on the reference oscillator. Appellants' own specification provides for multiple local oscillators that are different than the reference oscillator yet in the arguments Appellant has confused the situation by equating a local oscillator in Peterzell et al. to a reference oscillator. This is improper. The BlueCore01b data sheet is provided for reference since it was published earlier and also shows the local oscillator.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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